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REMARKS

In the Office Action, the Examiner indicated that claims 14, 15, 23, and 24 would be allowable if rewritten in independent form. Applicants wish to thank the Examiner for this early indication of allowable subject matter.

In the Office Action, the Examiner objected to claim 10 due to an informality; rejected claims 1-7, 9-13, 16, 17, and 25 under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 6,297,781 issued to Turnbull et al.; rejected claim 8 under 35 U.S.C. §103(a) as being unpatentable over Turnbull et al. in view of U.S. Patent No. 5,825,286 issued to Coulthard; and rejected claims 18-22 under 35 U.S.C. §103(a) as being unpatentable over Turnbull et al. in view of U.S. Patent No. 4,875,167 issued to Price et al. Applicant respectfully traverses these rejections for the reasons stated below.

By this Amendment, Applicant has amended the specification to update the status of the referenced parent application, and has amended claims 4 and 10 to more clearly define the present invention. Accordingly, claims 1-24 remain pending in this application.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. The attached page is captioned "Version With Markings to Show Changes Made."

With respect to the objection to claim 10, Applicant has amended claim 10 to correct this typographical error kindly pointed out by the Examiner.

Applicant respectfully traverses the rejection of claims 1-7, 9-13, 16, 17, and 25 under 35 U.S.C. §102(a) as being anticipated by Turnbull et al. Independent claim 1 defines a

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mileage display system for a vehicle comprising at least "a receiver for receiving a signal from a remote transmitter; a mileage accumulator coupled to said receiver for accumulating vehicle mileage received from a mileage sensor as the vehicle travels in response to a signal received by said receiver from the remote transmitter; and a display for displaying the vehicle mileage accumulated by said mileage accumulator." Applicant submits that Turnbull et al. does not disclose each and every feature recited in claim 1.

In the Office Action, the Examiner contends that receiver 136 of Turnbull et al. corresponds to the recited receiver, and that receiver 136 is configured for receiving a signal from a remote transmitter. As to the recited "remote transmitter," the Examiner refers to transmitter 134 and references column 9, lines 40-64 of Turnbull et al. As shown in Fig. 6 of Turnbull et al., both receiver 136 and transmitter 134 are coupled to a common microprocessor 110. Nowhere in the patent, however, does Turnbull et al. teach or suggest that signals transmitted by transmitter 134 are received by receiver 136. In fact, column 9, lines 40-64 suggests that transmitter 134 is preferably an infrared transmitter while receiver 136 is preferably configured to receive RF signals. Accordingly, the Examiner's interpretation of Turnbull et al. appears to be incorrect.

Also, the Examiner contends that the recited "mileage accumulator" corresponds to odometer 154 of Turnbull et al. The Examiner contends that odometer 154 is coupled to receiver 136 for accumulating vehicle mileage received from a mileage sensor as the vehicle travels in response to a signal received by the receiver (136) from the remote transmitter (134). The Examiner refers to Figs. 6 and 7 and to column 6, lines 11-43 of Turnbull et al. Although

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Turnbull et al. does disclose an odometer 154 and a receiver 136, which are both coupled either directly or indirectly via the vehicle bus to a common microprocessor 110, the similarity between the disclosure of Turnbull et al. and the claimed invention goes no further. Odometer 154 of Turnbull et al. is disclosed as being a conventional odometer, which would accumulate vehicle mileage at all times that the vehicle travels over the lifetime of the vehicle (note column 26, line 12 through 15). Nowhere, however, does Turnbull et al. teach or suggest that the odometer 154 be responsive to signals received by receiver 134 from a remote transmitter, let alone accumulate vehicle mileage in response to any such signal. Moreover, configuring the vehicle odometer to be selectively activated would be illegal in most countries. Applicant has carefully reviewed column 26, lines 11-43 of Turnbull et al. and respectfully submits that the Turnbull et al. patent does not teach or suggest the functional relationship between the recited elements of independent claim 1.

For the reasons stated above, Applicant submits that Turnbull et al. fails to teach or suggest each and every feature of independent claim 1 and, thus, independent claim 1, as well as claims 2-5, which depend therefrom, are allowable over the teachings of Turnbull et al.

With respect to claim 2, the Examiner contends that Turnbull et al. discloses an interface for coupling to an odometer sensor of the vehicle to receive a vehicle travel distance signal from which the vehicle mileage may be ascertained. The Examiner indicates that vehicle bus interface 116 shown in Fig. 6 of Turnbull et al. corresponds to the recited interface. However, it should be noted that claim 2 recites that it is the mileage accumulator that includes the recited interface for coupling to an odometer sensor of the vehicle. The

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Examiner had previously indicated that the mileage accumulator corresponds to odometer 154. Although interface 116 serves to couple microprocessor 110 to the vehicle bus, which in turn is coupled to odometer 154, this interface is not part of the odometer 154, nor would it couple to an odometer sensor of the vehicle to receive a vehicle travel distance signal from which the mileage accumulator could ascertain the vehicle mileage. Accordingly, claim 2 is allowable for this additional reason.

With respect to claim 3, which depends from claim 2, the Examiner contends that Turnbull et al. discloses a switching device coupled to the interface for receiving and selectively transmitting the vehicle travel distance signal. The Examiner refers to switches 130 shown in Fig. 6 of Turnbull et al. as corresponding to the recited switching device. The Examiner also references column 9, lines 32-38. Applicant has reviewed this portion of Turnbull et al. and respectfully submits that Turnbull et al. does not teach or suggest any switching device that is coupled to interface 116 for receiving and selectively transmitting the vehicle travel distance signal. Again, it should be noted that for claim 3, the vehicle travel distance signal is that which the mileage accumulator receives from an odometer sensor through the interface. Accordingly, claim 3 is allowable for this additional reason.

With respect to claim 4, the Examiner contends that memory 126 shown in Fig. 6 corresponds to the recited memory device. The Examiner further contends that microprocessor 110 corresponds to the recited processing circuit, which is recited as being coupled to an output of the switching device and to the memory for calculating cumulative travel distance in response to the vehicle distance signal selectively transmitted through the

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switching device and for storing the cumulative travel distance in the memory. Applicant has carefully reviewed column 9, lines 20-31 of Turnbull et al., which was cited by the Examiner, and respectfully submits that Turnbull et al. does not teach or suggest the features claimed in claim 4. Specifically, nowhere does Turnbull et al. teach or suggest that the processor calculates cumulative travel distance in response to a vehicle distance signal that is transmitted through a switching device, wherein the switching device is coupled to an interface, which receives and selectively transmits the vehicle travel distance signal. Accordingly, claim 4 is allowable for this additional reason.

With respect to claim 5, Turnbull et al. does not disclose that microprocessor 110 controls a switching device to transmit the vehicle travel distance signal when a signal is received from receiver 136. Accordingly, claim 5 is allowable for this additional reason.

Independent claim 6 defines a vehicle mileage tracking system comprising at least "a tripmeter mounted on a vehicle for tracking travel distance of the vehicle; a transmitter mounted in the vehicle coupled to said tripmeter for transmitting the travel distance; a receiver remotely located from the vehicle for receiving the travel distance transmitted by said transmitter; and a computer coupled to said receiver for receiving and storing the travel distance received by said receiver." The Examiner again contends that the tripmeter corresponds to odometer 154 shown in Fig. 7 of Turnbull et al. while the recited transmitter corresponds to transmitter 134 shown in Fig. 6 of Turnbull et al. Moreover, the receiver 136 is indicated as corresponding to the recited receiver, and computer 21 shown in Fig. 1 of Turnbull et al. is said to correspond to the recited computer. Applicant submits, however, that

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Turnbull et al. does not teach or suggest the functional relationship between the elements that is presently recited in claim 6. Specifically, claim 6 recites that the receiver is remotely located from the vehicle for receiving the travel distance transmitted by the transmitter. Receiver 136 in Turnbull et al., however, is hardwired to microprocessor 110, which is also hardwired to transmitter 134. There is no suggestion in the teachings of Turnbull et al. to transmit signals from transmitter 134 to receiver 136.

Furthermore, there would be no reason why receiver 134 would be positioned remote from the vehicle. If one repositioned receiver 136 such that it was remote from the vehicle, it could not then be hardwired to the microprocessor 110 and would not operate. Furthermore, if the microprocessor 110 had stored therein the vehicle travel distance, there would be no reason why it would need to cause transmitter 134 to transmit the travel distance to receiver 136 when both the receiver and the transmitter are hardwired to microprocessor 110. Furthermore, computer 21 is not disclosed as receiving and storing any travel distance received by the receiver 136. Although the Turnbull et al. patent discloses that the transmitter 134 may transmit an infrared signal to a laptop computer 21, it discloses that the information transmitted is the vehicle latitude and longitude such that a navigation program running on the laptop computer may be used to locate the position of the vehicle and provide travel directions. Nowhere, however, does Turnbull et al. state that microprocessor 110 would compute travel distance and then transmit the computed travel distance to computer 21. Moreover, insofar as claim 6 requires that the computer be coupled to the receiver and that the receiver be located remotely from the vehicle, any computer reading upon the claimed computer would also need

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to be remotely located from the vehicle. Computer 21 in Turnbull et al., however, is intended to be located within the vehicle so as to enable navigation using the computer. Placing the computer 21 remote from the vehicle would destroy the disclosed navigation function for which the computer is utilized in the first place.

For the reasons stated above, Applicant submits that independent claim 6 is allowable over the teachings of Turnbull et al. Thus, claims 7 and 9, which depend from claim 6, are allowable over Turnbull et al.

With respect to claim 7, the Examiner contends that Turnbull et al. discloses that the computer 21 is configured to automatically generate and store an electronic record indicating the vehicle and travel distance. The Examiner refers to column 7, line 65 to column 8, line 39 and to column 19, lines 31-67 of Turnbull et al. Although column 7, line 65 through column 8, line 39 of Turnbull et al. discloses that microprocessor 110 may compute distance of travel based upon the change of position over time as sensed through the GPS receiver, Turnbull et al. does not disclose that such computed distance of travel is transmitted to a receiver and computer that are remotely located from the vehicle. Nor, for that matter, is there any need to identify the vehicle and hence for the computer to store an electronic record identifying the vehicle and the travel distance. Column 19, lines 31-67 merely relate to the transmission of vehicle position information from transmitter 134 to the laptop computer 21 such that it may be used as a navigation system for the vehicle. Again, however, placing the laptop and the receiver remote from the vehicle would destroy the function in Turnbull et al. of

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using the laptop computer in the first place as a navigational aid. Accordingly, claim 7 is allowable for this additional reason.

With respect to claim 9, the Examiner contends that Turnbull et al. discloses a computer being a computer server coupled to a local area network. Here, the Examiner refers to Fig. 1 and column 26, lines 1-10 of Turnbull et al. Fig. 1, however, does not disclose a computer server connected to a local area network. Moreover, column 26, lines 1-10 merely states that transmitter 134 may transmit not only GPS data, but also any other information that is transmitted over the vehicle network. Such information includes diagnostic information as well as accident data to a handheld receiver that supplies the accident data or diagnostic data to the police or a technician. Such "accident data" is disclosed as possibly including recent vehicle speed, vehicle position, and direction traveled. It should be noted, however, that *distance* traveled is different from direction of travel, and would not be particularly pertinent in investigating an accident, and would not be considered to be "accident data" by one skilled in the art. Furthermore, computer 21 in Turnbull et al. is not connected to the vehicle network. Therefore, it could not be considered a computer server that is coupled to a local area network. Accordingly, claim 9 is allowable for this additional reason.

With respect to claim 10, the Examiner states that Turnbull et al. does not expressly disclose an electronic mail (e-mail) message including the vehicle identification code and travel distance. The Examiner, however, contends that it is considered inherent that Turnbull et al. add an electronic mail message including the vehicle identification code and travel distance "because such a system is known to be a necessary element in order that information of vehicle

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identification code and travel distance can be transmitted via the computer to either the police or a technician.” Applicant respectfully disagrees with the Examiner insofar as there are numerous ways to transmit such information without utilizing a computer server to generate an electronic mail message. As noted above with respect to claim 9, the system in Turnbull et al. does not disclose any such computer server in the first place. Moreover, the information is transmitted from transmitter 134 to a handheld receiver and does not at all involve computer 21. Furthermore, provided the handheld receiver is configured to recognize the data stream from the vehicle, there is no need for such information to be formatted into an e-mail message. In addition, Turnbull et al. does not disclose that the vehicle identification code is transmitted via transmitter 134. Accordingly, claim 10 is allowable for this additional reason.

With respect to claim 11, the Examiner contends that Turnbull et al. discloses that the transmitter may be a transceiver for receiving an interrogation signal and then transmit vehicle mileage in response to such an interrogation signal. The Examiner refers to column 9, lines 40-64. Applicant has carefully reviewed this portion of Turnbull et al., however, nowhere is there any mention of an interrogation signal, let alone a transceiver that responds to an interrogation signal so as to subsequently transmit vehicle mileage in response to the interrogation signal. Accordingly, claim 11 is allowable for this additional reason.

Independent claim 12 defines a mileage tracking system for use in a vehicle where the mileage tracking system comprises at least “a tripmeter for tracking travel distance of the vehicle; and a transmitter coupled to said tripmeter for transmitting the travel distance to a receiver that is remotely located from the vehicle.” As discussed above with respect to

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claim 6, Turnbull et al. does not disclose a transmitter that transmits travel distance to a receiver that is remotely located from the vehicle. Receiver 136 of Turnbull et al. is clearly not remotely located, insofar as it is hardwired to microprocessor 110, which is contained in the vehicle. Accordingly, independent claim 12 is allowable over the teachings of Turnbull et al. Likewise, claims 13, 16, 17, and 25, which depend from claim 12, are allowable for these same reasons.

Applicant further submits that claim 25 is allowable over Turnbull et al. for the additional reasons stated above with respect to claim 11.

With respect to claim 17, this claim recites that the vehicle tripmeter time and date stamps mileage trip segments that are recorded between periods defined by the vehicle ignition being turned on and off. The Examiner contends that Turnbull et al. discloses that the vehicle tripmeter time stamps mileage trip segments that are recorded between periods while referring to column 25, lines 4-22 of Turnbull et al. Although it is clear that Turnbull et al. does time stamp vehicle data that is stored in the vehicle "black box" data recorder, such vehicle information that is recorded includes vehicle speed, vehicle direction, position of the vehicle, application of the vehicle brakes, and/or airbag deployment. The Turnbull et al. patent discloses that this time stamp data may be read from memory to enable law enforcement officials to reconstruct the scene of an accident in a manner similar to how such black boxes are used in reconstructing the events immediately preceding an airplane crash. Such information, however, does not include vehicle travel distance. Accordingly, there would be no reason to time stamp travel distance representing trip segments that are recorded between

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periods defined by the vehicle being turned on and off. The Examiner further points out that Turnbull et al. does not expressly disclose that trip segments are time stamped between the vehicle ignition being turned on and off. However, the Examiner states that it is considered inherent, because such definition is known to be a necessary requirement in order that an odometer data computer system can start accumulating the trip mileage when the engine is turned on and stop accumulating the trip mileage when the ignition is turned off. However, a typical vehicle odometer does not time or date stamp any data. Instead, the odometer would accumulate mileage anytime the vehicle ignition is on and the vehicle is moving. The reference in claim 17 to the vehicle ignition being turned on and off is that such events define the mileage trip segment referred to in claim 17 for which a time and date stamp stored in memory in association with the travel distance of that trip segment. Nowhere in Turnbull et al. is such a feature disclosed. Accordingly, claim 17 is allowable for this additional reason.

Applicant respectfully traverses the rejection of claim 8 under 35 U.S.C. §103(a) as being unpatentable over Turnbull et al. in view of U.S. Patent No. 5,825,286 issued to Coulthard. Claim 8 depends from claim 6 and is believed to be allowable for at least those reasons stated above with respect to claim 6. Specifically, Applicant submits that Coulthard fails to teach or suggest the deficiencies noted above with respect to Turnbull et al. as applied to independent claim 6 above. Accordingly, claim 8 is allowable over the teachings of Turnbull et al. and Coulthard whether considered separately or in combination.

Applicant respectfully traverses the rejection of claims 18-22 under 35 U.S.C. §103(a) as being unpatentable over Turnbull et al. in view of U.S. Patent No. 4,875,167 issued to

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Price et al. Claims 18-22 depend from independent claim 12 and are believed to be allowable for at least those reasons stated above with respect to claim 12. Further, it is noted that Price et al. fails to teach or suggest the deficiencies in the teachings of Turnbull et al. with respect to the subject matter of claim 12, and thus independent claim 12, as well as claims 18-22, are allowable over the combined teachings of Turnbull et al. and Price et al. whether considered separately or in combination.

In view of the foregoing remarks, Applicant submits that the present invention as defined in the pending claims is allowable over the prior art of record. The Examiner's reconsideration and timely allowance of the claims is requested. A Notice of Allowance is therefore respectfully solicited.

Respectfully submitted,

By: Price, Heneveld, Cooper,
DeWitt & Litton

11-25-2002
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Please amend the first paragraph under the heading "Cross Reference to Related Applications" as follows:

This application is a continuation of U.S. Patent Application No. 09/358,661, entitled VEHICLE ACCESSORY FOR MONITORING TRAVEL DISTANCE, filed on July 21, 1999 by Terry S. Callaghan, now U.S. Patent No. 6,434,510, the entire disclosure of which is incorporated herein by reference.

Please amend paragraph 2 as follows:

Individuals who use ~~their~~this/her vehicle for both business and personal use typically have to track their mileage for either business or personal trips in order to be reimbursed or keep records for tax purposes. In some cases, an individual may wish to track the total accumulated mileage for their vehicle for each of several different purposes. For example, an individual may wish or need to keep track of the total mileage traveled when using the vehicle for business or personal use so as to properly track business expenses associated with the vehicle over the course of a year or other time period. Such tracking is important to business owners in the United States, who may deduct from their taxes the percentage of the expenses for a business owned or leased vehicle that is related to the business use of the vehicle.

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Please amend paragraph 31 as follows:

The vehicle tripmeter of the present invention could also prompt the driver to verify a selection. For example, the tripmeter could, after receiving one of the first or second door unlock signals, display a message such as Business, Business Trip Selected, Personal, or Personal Trip Selected. The vehicle tripmeter thus prompts the driver to press a particular switch or sequence of switches to change the purpose of the trip if the driver wishes to change his or her initial selection. The vehicle tripmeter could also be programmed to only actively seek verification upon certain circumstances. For example, since commuting to work generally does not qualify as a tax-deductible business trip, the vehicle may ask for verification that a selected trip purpose is in fact for business when the vehicle determines that it is located at the driver's home residence. The vehicle may make such a determination based upon GPS data from GPS receiver 58, or from an activation of the trainable transmitter to transmit a garage door opening/closing signal just prior to ignition shut down in the prior ignition cycle.

Additionally, a home transceiver could issue a beacon signal that is received by receiver 15 when the vehicle is in proximity to the driver's home. Conversely, when the driver selects a personal trip when the tripmeter knows that the vehicle is at an offsite business location or client location, it can prompt the driver to verify that the purpose of the trip is in fact personal. The tripmeter may determine that the vehicle is so located based upon GPS data and the past history for trips to locations having the same relative GPS position.

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In the Claims:

Please amend claims 4 and 10 as follows:

4. (Amended) The mileage display system as defined in claim 3, wherein said mileage accumulator further includes:

a memory device for storing cumulative travel distance; and

a processing circuit coupled to an output of said switching device and to said memory for calculating cumulative travel distance in response to the vehicle travel distance signal selectively transmitted through said switching device and for storing the cumulative travel distance in said memory.

10. (Amended) The vehicle mileage tracking system of claim 9, wherein said computer server generates and electronic mail message including the vehicle identification code and travel distance.